

Amendments to the Claims:

Listing of Claims:

1-12. (Canceled).

13. (Currently Amended) A multi-voltage on-board electrical system for providing at least a first voltage level and a second voltage level different from ground, comprising:

a generator for generating a first voltage level;

at least one voltage converter for generating the second voltage level from the first voltage level;

a switching arrangement;

consumers that are operable, via the switching arrangement, with one of the first voltage level and the second voltage level; and

an arrangement for providing a short circuit protection, the arrangement configured to at least one of reduce a risk of a short circuit between the first voltage level and the second voltage level and minimize an effect of the short circuit;

wherein in an event of a short circuit:

a) the arrangement for providing short circuit protection is further configured to protect an at-risk consumer at a lower voltage level;

b) the switching arrangement connects at least one of the consumers at a lower voltage level; and

c) at least one of the consumers is configured to carry a current which occurs between the first voltage level and the second voltage level, thereby lowering an overvoltage occurring with respect to the lower voltage level.

14. (Canceled).

15. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, wherein the system is a dual-voltage on-board electrical system in a motor vehicle.

16. (Currently Amended) The multi-voltage on-board electrical system according to claim 15, further comprising:

a first battery having a nominal voltage of 12V; and

a second battery having a nominal voltage of 36V,

wherein at least one of the first battery and the second battery includes an intelligent battery terminal ~~having a preselectable property including~~ configured to enable an overvoltage disconnect.

17. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, wherein at least one of the consumers includes at least one microprocessor and is assigned to the at least one voltage converter, and wherein the at least one consumer including the at least one microprocessor distributes electric power.

18. (Previously Presented) The multi-voltage on-board electrical system according to claim 17, wherein the at least one consumer including the at least one microprocessor is configured to control at least one other signal-power distributor.

19. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, further comprising:

a central signal-power distributor including another voltage converter, wherein unprotected 36V and 42V lines of the multi-voltage on-board electrical system are combined and are mounted in a spatial proximity to the central signal-power distributor, and one of 12V and 14V lines of the multi-voltage on-board electrical system are installed at a greatest possible distance from the unprotected 36V and 42V lines.

20. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, further comprising:

a pulse-controlled inverter assigned to the generator to rectify an output voltage of the generator in order to produce a rectified voltage and to supply the rectified voltage to a d.c.-d.c. converter.

21. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, further comprising:

at least one satellite signal-power distributor; and

a master signal-power distributor to one of control and protect the at least one satellite signal-power distributor.

22. (Canceled).

23. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, wherein the switching arrangement applies a voltage to at least one of the consumers associated therewith, the switching arrangement including a current measurement arrangement configured to display the short circuit in an event of an excessively high current.

24. (Canceled).

25. (Currently Amended) The on-board electrical system according to claim ~~[[24]]~~13, wherein the at least one of the consumers is a MOSFET power transistor.

26. (Previously Presented) The multi-voltage on-board electrical system according to claim 25, further comprising:
a comparator to control the MOSFET power transistor.

27. (Previously Presented) The multi-voltage on-board electrical system according to claim 25, wherein the MOSFET power transistor is configured to limit a current across two resistors connected in series and the MOSFET power transistor is further configured to conduct the current if a predefinable reference voltage is exceeded.

28. (Previously Presented) The multi-voltage on-board electrical system according to claim 13, wherein a overall configuration for an electric battery and a power management system is obtained by using an appropriate arrangement for implementing management functions.